

**INTER-UNIVERSITY BOARD  
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**UNIVERSITY GRANTS COMMISSION**

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**REPORT FOR THE YEAR**

**1970-71**

**Presented to the Government of India in compliance  
with Section 18 of the UGC Act, 1956**

**NEW DELHI**

# UNIVERSITY GRANTS COMMISSION

1970-71

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# UNIVERSITY GRANTS COMMISSION

## ANNUAL REPORT

April 1970 to March 1971

In compliance with Section 18 of the University Grants Commission Act, 1956, we\* present to the Central Government a report on the work of the Commission for the year 1970-71 to be laid before Parliament.

### INTRODUCTION

The growth and expansion in the field of higher education, during the last ten years, are indicated by the following facts and figures :

<i>Year</i>	<i>Number of Universities**</i>	<i>Number of Colleges***</i>	<i>Number of Teachers***</i>	<i>Student Enrolment†</i>
1	2	3	4	5
1961-62	49	1,783	63,053	11,55,380
1966-67	77	2,749	93,251	19,49,012
1970-71	93	3,604	1,28,876	30,01,292

A chronological list of universities with their student enrolment and a statement showing the distribution of colleges according to courses of study during the period 1966-67 to 1970-71 are given in Appendices I and II. The Commission has given its concurrence to the proposal for the

Recently some changes have occurred in the membership of the Commission. Shri Govindan Nair passed away in May, 1971. Shri M. R. Yardi, Secretary, Department of Expenditure, Ministry of Finance, Government of India, was appointed member of the Commission in his place with effect from 14th June, 1971. On the retirement of Shri G. K. Chandiramani, Shri T. P. Singh, Secretary, Ministry of Education & Social Welfare, Government of India, was appointed member of the Commission with effect from 30th June 1971. Dr. P.B. Gajendragadkar, resigned as Vice-Chancellor, Bombay University and thus ceased to be a member of the Commission with effect from 1st October, 1971. Dr. S. Dhawan went abroad for one year w.e.f. April 1971, and has, therefore, not been able to attend the Commission's meetings. He ceased to be a member of the Commission with effect from 6th October, 1971. His term was due to expire in February, 1972.

\*\* Including institutions deemed to be universities under Section 3 of the UGC Act, 1956.

\*\*\* Excluding intermediate colleges of U. P.

† Including enrolment in the intermediate classes under the Board of High School and Intermediate Education, U. P.

establishment of a university at Cochin. The proposal for declaring the Mahila Gram Vidyapith, Prayag, as an institution deemed to be a university could not be accepted.

The student enrolment in the field of higher education rose steeply from 11.55 lakhs in 1961-62 to 19.49 lakhs in 1966-67 and to 30.01 lakhs in 1970-71. The increase in student population during the year under review was 2.09 lakhs. Statements showing the trends in student enrolment, faculty-wise and according to stages of instruction, are given in Appendices III to V. At the postgraduate level, the student enrolment rose from 1,35,459 in 1968-69 to 1,61,182 in 1970-71. The enrolment for research increased from 12,145 to 13,311 over the same period. The strength and distribution of the teaching staff in the universities and colleges, according to designation, are shown in Appendices VI and VII. The overall teacher-pupil ratio has declined from 1 : 19.3 to 1 : 20.3 during the period 1968-69 to 1970-71.

The output of graduates has, in recent years, increased significantly in the faculties of arts, science, commerce, education, medicine and agriculture (including veterinary science). A statement indicating the percentage increase in the degrees awarded in the different faculties for the period 1965-66 to 1967-68 is given in Appendix VIII.

## **GRANTS TO UNIVERSITIES**

On the basis of the recommendations of committees appointed to assess the programmes of development formulated by the universities, the Commission allocated grants amounting to Rs. 53.32 crores to 60 universities and seven institutions deemed to be universities for the period 1966-67 to 1973-74. In addition, grants amounting to Rs. 80 lakhs for the Calicut University, Rs. 75 lakhs for the Kanpur University and Rs. 650 lakhs for the Jawaharlal Nehru University were allocated for the period ending 1973-74. These universities have been requested to indicate the programmes which they would adjust within the allocation available to them. The Kanpur and Calicut Universities have been requested in the first instance, to undertake programmes within 70% of the allocation made available to them.

The programmes for which universities are being assisted include diversification of the courses of study, extension and development of facilities for teaching and research, and the provision of additional staff, building accommodation, library and laboratory facilities, books and

equipment, student amenities etc. Development grants provided to the universities and institutions deemed to be universities during the period 1968-69 to 1970-71 were as follows :

<i>Purpose</i>	<i>(Rupees in lakhs)</i>		
	<i>Grants paid</i>		
	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Science subjects	260.93	360.56	345.42
Humanities and social sciences	119.71	171.74	209.63
Engineering and technology	242.72	268.14	186.36
Miscellaneous schemes*	292.90	334.68	422.63

Developmental expenditure on teaching and research in science has risen from Rs. 2.61 crores in 1968-69 to Rs. 3.45 crores in 1970-71. The expenditure on science under major heads during the last three years was as follows :

<i>Items of expenditure</i>	<i>(Rupees in lakhs)</i>		
	<i>Grants paid</i>		
	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Staff	28.78	55.73	68.90
Equipment	62.57	99.65	78.09
Books and journals	31.37	74.25	59.53
Laboratories and other buildings	90.70	85.50	88.86
Centres of advanced study	47.51	44.85	48.44
Miscellaneous	—	0.58	1.60
Total	260.93	360.56	345.42

The expenditure on additional staff and equipment has increased significantly. Senior academic positions, i.e., professors and readers have been substantially increased, and provision has been made for workshop facilities needed for fabrication as well as for maintenance and servicing

\* Provision of residential accommodation for staff and students, library buildings, amenities for students etc.

of equipment. It has been decided that universities may utilise up to 20% of the equipment grant available to them for purchasing materials and components required for the fabrication and development of equipment.

The break-up of expenditure on teaching and research in the humanities and social sciences during the period 1968-69 to 1970-71 is as follows :

<i>Items of expenditure</i>	<i>(Rupees in lakhs)</i>		
	<i>Grants paid</i>		
	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71</i>
<i>I</i>	<i>2</i>	<i>3</i>	<i>4</i>
Staff	39.06	44.70	77.29
Equipment	4.38	5.59	5.07
Books and journals	35.70	62.21	54.67
Buildings	17.36	30.47	36.19
Centres of advanced study	20.44	24.56	23.89
Area studies programmes	2.77	4.21	3.49
Teachers training programmes	--	--	9.03
Total	119.71	171.74	209.63

On the recommendations of the committees which assessed the development programmes of the universities, grants amounting to Rs. 78.88 lakhs were earlier allocated for the construction or extension of library buildings in the universities. The following grants have been provided during 1968-69 to 1970-71 for the improvement of library facilities :

<i>Year</i>	<i>(Rupees in lakhs)</i>	
	<i>Grants paid</i>	
	<i>Library buildings</i>	<i>Books and journals</i>
<i>I</i>	<i>2</i>	<i>3</i>
1968-69	13.40	67.07
1969-70	19.08	167.93
1970-71	13.87	140.66

The Commission has been providing assistance to the universities for the development and consolidation of education and research in engineering and technology. This is intended for university departments and institutions maintained by the universities. The development expendi-



ture incurred by the Commission for engineering and technology during 1969-70 and 1970-71 was as follows :

<i>Items of expenditure</i>	<i>(Rupees in lakhs)</i>	
	<i>1969-70</i>	<i>1970-71</i>
Staff and maintenance	50.03	51.27
Buildings	80.08	38.20
Books and journals	31.46	26.47
Equipment	63.03	44.55
Fellowships	34.44	23.81
Miscellaneous schemes	9.09	2.06
Total	268.13	186.36

Assistance was provided, *inter-alia* for diversification of courses and new specialisations, research programmes, courses in chemical engineering, pharmacy and business administration, improvement of existing facilities, fellowships, etc.

In addition to the grants referred to above, assistance was also provided to the universities for a number of other programmes mentioned below :

*(i) University Centres of Postgraduate Studies*

The Commission has already accepted the proposals for the establishment of centers of postgraduate studies at Anantapur ( Sri Venkateswara University ), Guntur (Andhra University), Mangalore (Mysore University), Rohtak and Simla\* (Panjab University), and Warangal (Osmania University). The proposals of the Madras and Karnatak Universities for the establishment of such centres at Coimbatore and Tiruchirapalli and Gulbarga were also accepted in 1969-70

The subjects in which instruction is imparted at the centres of postgraduate studies are indicated below :

<i>Centre</i>	<i>Subjects</i>
Anantapur	Physics, Mathematics, Chemistry, English and Telugu.
Coimbatore	Physics, Chemistry, Mathematics, Botany, Zoology, Geography, Statistics, Economics, English, Social Work, and Home Science (Bio-Chemistry and Nutrition.)

\* This centre has since merged with the Himachal Pradesh University.

<i>Centre</i>	<i>Subjects</i>
Guntur	Physics, Chemistry, Botany, Zoology, Mathematics, Economics, Commerce, Telugu and English.
Gulbarga	Chemistry, Mathematics, Kannada and English.
Mangalore	Physics, Mathematics, Kannada, Bio-Science and Commerce.
Rohtak	Physics, Chemistry, Mathematics, English, Hindi, Economics and Political Science.
Tiruchirappalli	Physics, Chemistry, Mathematics, Botany, Zoology, Geology, English and Economics.
Warangal	Physics, Chemistry, Botany, Zoology, Mathematics, Commerce, Public Administration, Telugu and English.

Grants amounting to Rs. 38.80 lakhs were made available to the universities concerned in 1970-71 for the developmental needs of the centres. The development of postgraduate studies at suitable places under the auspices of the universities and in collaboration with the colleges located in the neighbourhood, is expected to help in maintaining and improving standards at the postgraduate level

#### *(ii) Book Production*

In collaboration with the Ministry of Education and Social Welfare, the Commission has been promoting the re-publication of low-priced editions of standard works originally published in the USA, UK and USSR. The books or titles to be published are evaluated by experts in the subject concerned, and suitable recommendations are then made by the Commission to the Ministry for this purpose. Up to 1969-70, 1,365 titles were recommended for re-publication in low-priced editions. In 1970-71, 144 books were evaluated and 98 of them were recommended for re-publication. The Commission has also been collaborating with the National Book Trust in bringing out subsidized editions of books in the English language.

In consultation with the Ministry of Education and Social Welfare, the Commission has decided to award fellowships, each of the value of Rs. 500 per month, with a grant of Rs. 2,000 per annum for expenditure on contingencies, for the production of quality books at the university level. The scholars to whom fellowships are offered are expected to work in association with distinguished university teachers. 73 projects regard-

ing book production were accepted in 1970-71. It is expected that 100 more projects will be taken up under this programme during 1971-72.\*

### (iii) *Correspondence Courses*

A reference was made to the value and importance of introducing correspondence courses in the Commission's report for 1969-70. The following universities have already introduced such courses :

<i>University</i>	<i>Courses</i>
Delhi	B. A. (Pass), B. Sc. (General) Group 'A'
Rajasthan	B. Com.
Punjabi	Pre-university course, B. A.
Mysore	Pre-university course, B. A.
Meerut	B. A.

The Commission has accepted the proposals of the Panjab University for starting correspondence courses for the pre-university course and B.A., of the Madurai University for B.A., and of the Andhra and Bombay Universities for B.A. and B.Com. The proposals of a few more-universities for the introduction of correspondence courses at various levels (including postgraduate level) are under consideration by the Commission.

Grants amounting to Rs. 2.95 lakhs were paid to the universities concerned during 1970-71 for correspondence courses.

### (iv) *Adult Education*

A note on the role of universities in adult education was circulated to the universities. The Commission has agreed to provide assistance to universities on a sharing basis of 75 (UGC) : 25 (University) within a ceiling of Rs. 3 lakhs for each university, for the remaining period of the fourth plan i. e. 1971-74 for programmes of adult or continuing education.

### (v) *Maintenance Grants—Central Universities*

Under Section 10 of the U.G.C. Act, 1956 the Commission provides grants to universities established or incorporated by a Central Act, for maintenance in addition to those for development. The maintenance grants

\* Total number of projects accepted up to 1.12.1971 was 180

paid to the central universities for 1970-71 are indicated below :

<i>University</i>	<i>(Rupees in lakhs)</i>
<i>Grants paid</i>	
Aligarh Muslim University	204.00
Banaras Hindu University	267.32
Delhi	126.00
Visva-Bharati	62.22
Jawaharlal Nehru University	
(a) School of International Studies	8.76
(b) School of Russian Studies	5.65
Total	673.95

In addition, a sum of Rs. 3.50 lakhs and Rs. 5.50 lakhs were paid for the maintenance of the hospitals attached to the medical colleges of the Aligarh Muslim University and the Banaras Hindu University respectively.

Apart from maintenance grants, a sum of Rs. 15.23 lakhs was made available to the central universities in 1970-71 for projects relating to campus development.

*(vi) Unassigned Grants*

Unassigned grants amounting to Rs. 19.34 lakhs were placed at the disposal of 73 universities in 1970-71 for meeting expenditure on a number of approved programmes. These grants could be utilised by them according to their need, without reference to the Commission. Unassigned grants are available *inter alia* for the following purposes :

- (a) Exchange of teachers.
- (b) Extension work by university teachers.
- (c) Travel grants to teachers and research scholars for visiting centres of research in the country.
- (d) Travel grants for attending seminars and conferences in India.
- (e) Preparation and development of teaching materials and aids.
- (f) Travel grants to teachers for attending international conferences.

The expenditure on programmes listed at (a) to (e) can be met by the universities, on a cent per cent basis out of the unassigned grants. Under (f) fifty per cent of the expenditure on travel grants for attending

international conferences can be debited to the unassigned grant, and the balance has to be provided by the university concerned.

### CENTRES OF ADVANCED STUDY

The Commission has been providing special assistance to 30 university departments, selected to function as centres of advanced study in various fields. These centres have been developed to encourage the pursuit of excellence and to raise the quality of academic achievement at the post-graduate and research levels. These centres function on an all-India basis and provide facilities for advanced study and research to scholars from various parts of the country.

A list of centres of advanced study and their areas of specialisation is given in Appendix IX. The development programmes of these centres for the fourth plan ending 1973-74 have been assessed by UGC committees and grants amounting to Rs. 4.71 crores, which include a capital outlay of Rs. 1.31 crores, have been approved for these centres. Grants amounting to Rs. 23.89 lakhs and Rs. 48.44 lakhs were provided to the centres of advanced study in the humanities and social sciences and those in science subjects respectively. Financial assistance is available to the centres on a cent per cent basis for the improvement of library and laboratory facilities, appointment of the requisite academic and non-academic staff, provision of scholarships and fellowships, publication of dissertations and research papers etc. The scholarships provided have enabled the centres of advanced study to attract talented students and teachers from various parts of the country. Visiting fellowships have also been made available to the centres to enable them to invite scientists and scholars from within and outside the country. In addition to a nucleus of permanent staff, the centres have a substantial number of scholars on deputation from other universities and colleges. Funds have also been provided to the centres for seminars, symposia and other programmes of training and research.

The Centre of Advanced Study in Botany, Madras University, organised two international symposia on 'pathological wilting of plants' and the 'taxonomy and biology of blue green algae'. The Centre of Advanced Study in Chemistry, Delhi University, organised a short term training programme in the chemistry of natural products, with UNESCO assistance. The course was also attended by some foreign participants. The Centre of Advanced Study in Biochemistry, Indian Institute of Science, Bangalore, proposes to organise an international symposium on lipids\*.

\* This was organised in December, 1971.

The Centre of Advanced Study in Botany, Delhi University, has prepared a plan for an international symposium on morphogenesis in plant cell, tissue and organ cultures\*. The Centre of Advanced Study in Physics, Delhi University proposes to organise a short term course in solid state physics on an all-India basis. A number of eminent scientists from the USSR, UK, USA and some other countries participated in the seminars and symposia organised by the centres of advanced study.

The Centres of Advanced Study in Mathematics at the universities of Bombay, Panjab, Madras and Calcutta continued the programme of inviting selected teachers from affiliated colleges for spending an academic year at the centres concerned to enable them to improve their competence and to initiate them into research. Such a programme has also been undertaken by the Centre of Advanced Study in Education at the M. S. University of Baroda.

Some centres have been requested by the US Department of Agriculture to undertake specialised research programmes with the help of PL 480 funds.

Each centre has an advisory committee consisting of the vice-chancellor, professors of the centre and experts from outside. The Commission receives periodically reports regarding the work and programmes of the centres.

On the recommendations of the UGC Standing Committee on 'Centres of Advanced Study', the Commission had earlier agreed to provide special assistance to 27 university departments for their programmes of postgraduate specialisation and research. Expert committees have visited 26 of these departments. The recommendations of these committees are under consideration by the Commission.

As hitherto, the UNESCO continued to give assistance to the centres of advanced study for their programmes of teaching and research. This assistance came mainly from the USSR in the shape of equipment, services of experts and training of Indian scholars in the USSR. A number of consultants from the USSR including Academician NN Bogolubov, visited India. Two senior fellows and five junior fellows went to the USSR under the UNESCO programme. Equipment worth \$1,00,000 was ordered by UNESCO for the centres. The Commission has reviewed the programme of UNESCO assistance and revised the list of centres to be benefitted under this programme.

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\* This was held in November, 1971

Dr. V. Parail, Director, Division of International Cooperation in Scientific Research, UNESCO, visited the centres of advanced study receiving UNESCO assistance. He discussed with the University Grants Commission and the centres concerned the possibility of organising short-term and long-term training programmes on an international level. The proposals made by Dr. Parail have been accepted by the Commission and plans for organising such activities are being formulated.

The Centre of Advanced Study in History, Aligarh Muslim University, and the Centre in Philosophy, Madras University, received assistance from the UNESCO for undertaking studies on the civilization of the people of central Asia. The Commission also provided separate funds to these centres for undertaking these studies.

The Government of the United Kingdom also provided some assistance to the centres of advanced study. Under the programme of British assistance, eight scholars from the UK visited the centres, and 22 teachers from the centres went to the UK. Equipment worth £ 50,320 was received by the centres under this programme from October, 1967 to February, 1970.

### ASSISTANCE TO COLLEGES

The number of colleges has risen rapidly in response to the growing demand for higher education. The total number of colleges in 1961-62 was 1,783. By the end of the third plan, i.e., in 1965-66, the number had risen to 2,572. In 1970-71, the number of colleges functioning in the country was 3,604. 307 new colleges were established during the year.

Student enrolment in the affiliated colleges was 22.87 lakhs as against 3.24 lakhs in the university departments (including university colleges). This shows that 88% of the students were enrolled in the affiliated colleges. Over 90% of the students receiving instruction in science, commerce and medicine were enrolled in the affiliated colleges. The statements showing the faculty-wise and stage-wise enrolment of students in the universities and colleges are given in Appendices X and XI.

About 48% of the students at the postgraduate level and 12% of the research scholars in various faculties were in the colleges in 1970-71.

The number of teachers in the affiliated colleges in 1970-71 was 1,07,257 as against 21,619 in the university departments (including university colleges). This indicates that about 83% of the total academic staff is working in the affiliated colleges.

It is obvious that colleges represent a very important sector of higher education in the country. The Commission has been providing assistance to colleges under various programmes of development. A total grant of Rs. 1.49 crores was made available to the colleges in 1966-67. In 1969-70 payment to the colleges amounted to Rs. 3.55 crores. In 1970-71, grants amounting to Rs. 7.40 crores were provided to colleges for their development programmes. This shows that the Commission's assistance to colleges has increased almost five-fold since 1966-67. A substantial portion of the outlay of Rs. 7.40 crores during 1970-71 was for provision of library and laboratory facilities, including acquisition of science equipment, books and journals, and for the programme of the improvement of science teaching in the colleges. A statement of the development grants paid to the colleges is given in Appendix XII.

### *Postgraduate Studies*

It was indicated in the report for 1969-70 that the Commission's assistance to colleges for development of postgraduate studies has been substantially raised. For the development of postgraduate studies in the humanities and social sciences, the total grants available to a college have been raised from Rs. 1,00,000 to Rs. 1,50,000 up to the end of the fourth plan period. For postgraduate departments in science subjects, the Commission's grant to a college has been raised from Rs. 1,00,000 to Rs. 1,50,000 each for Physics and Chemistry; from Rs. 75,000 to Rs. 1,00,000 each for Botany, Biochemistry, Home Science and Zoology; and from Rs. 50,000 to Rs. 75,000 each for Anthropology, Geography, and Mathematics (including Statistics). The Commission shares 50% of the approved expenditure on buildings and additional academic staff, and 75% on equipment and books.

In 1970-71, proposals from 28 colleges were accepted by the Commission for the development of 51 science departments. The Commission approved a grant of Rs. 19.36 lakhs for this purpose. The number of colleges assisted under this scheme during the fourth plan period so far is 116.

For the development of postgraduate studies in humanities and social sciences, grants amounting to Rs. 18.81 lakhs were approved for 32 colleges. The number of colleges assisted under this scheme during the fourth Plan so far is 94.

### *General Facilities*

The Commission continued to provide grants to colleges, on the prescribed sharing basis, for library and laboratory facilities (including



purchase of books and equipment), class-rooms and lecture theatres, workshops, for science departments, non-resident students' centres, residential accommodation for staff and students, tube-wells and over-head tanks and cycle sheds. The assistance to a college for its development programmes referred to above is limited to Rs. 3,00,000 for the period 1966-67 to 1973-74. This is inclusive of grants paid or payable in respect of projects continuing from the earlier plan period. In special cases, as assessed on the basis of the needs of a college, the merit of its development proposal and the progress made by the college in the implementation of its development programmes, assistance may be given to the institution beyond the ceiling of rupees three lakhs up to a limit of rupees one lakh, on the usual sharing basis for various projects.

The scheme mentioned above has helped numerous colleges to extend and improve the existing facilities. The proposals of colleges relating to library and laboratory facilities, students hostels, residential accommodation for teachers and non-resident student centres during 1969-70 and 1970-71 were as follows :

<i>Project</i>	<i>(Rupees in lakhs)</i>			
	<i>1969-70</i>		<i>1970-71</i>	
	<i>Number of proposals accepted</i>	<i>Grants approved</i>	<i>Number of proposals accepted</i>	<i>Grants approved</i>
(1) Teaching accommodation, library and laboratory facilities	198	136.02	214	183.14
(2) Student hostels	56	70.87	59	81.84
(3) Teachers hostels/ staff quarters	40	34.08	15	16.53
(4) Non-resident student centres	31	11.20	42	15.66

In addition, Commission approved payment of grants amounting to Rs. 1.58 lakhs to five colleges for the provision of cycle sheds and tube-wells.

Since 1966-67 assistance has been extended to about 1,000 colleges under the scheme. Assistance for the projects mentioned above is at present not available to colleges of agriculture, engineering and technology, and medicine.

### *College Science Improvement Programme*

The college science improvement programme, as stated in the Commission's report for 1969-70, is intended to bring about qualitative development of teaching in the physical, biological and mathematical sciences in predominantly undergraduate colleges. The programme has been undertaken at two levels as under :

- (a) Assistance to selected colleges for better methods of instruction, laboratory equipment and workshop facilities, refresher courses for teachers, project work, special training for gifted students, etc.
- (b) Assistance to selected university departments for development of improved courses of study and curriculum material, organisation of orientation courses for college teachers, development of workshop facilities and teaching aids, inviting selected teachers to spend an academic year with a university department and to encourage teachers to undertake research, etc.

Significant progress was made under this programme. Thirteen projects to be undertaken by the university departments at an estimated cost of Rs. 94.87 lakhs have been accepted. Assistance has been approved for the development projects of 51\* colleges which are estimated to cost Rs. 143.58 lakhs.

### *Teachers' Training Colleges*

The Commission had earlier decided to provide separate assistance to teachers' training colleges during the fourth plan period. This assistance is available for the provision of additional staff, extension of library and laboratory facilities, provision of non-resident student centres and residential accommodation for students and staff, etc. It was decided to raise the financial ceiling of assistance from Rs. 1.5 lakhs to Rs. 2 lakhs for a college conducting B. Ed. courses and from Rs. 2 lakhs to Rs. 3 lakhs for a college providing both B. Ed. and M. Ed. courses. The Commission's assistance is available on the prescribed sharing basis. For schemes like the preparation of teaching aids, reading material, experimental work, etc., the Commission's assistance is available on a cent per cent basis. Ordinarily, assistance up to Rs. 1,00,000 only may be utilised for building projects.

A sum of Rs. 15 lakhs has been allocated for 150 colleges conducting B. Ed. courses at the rate of Rs. 10,000 per college, and Rs. 7.50 lakhs

\*Up to 30th November 1971, assistance was approved for 75 colleges.

for 50 colleges providing B.Ed. and M.Ed. courses at the rate of Rs.15,000 per college, for the purchase of basic equipment and audio-visual aids. Payments to teachers' training colleges for various development programmes amounted to Rs. 24.09 lakhs during 1970-71.

#### *Basic Grants for Books and Equipment*

Grants ranging from Rs. 4,500 to Rs. 6,500, according to student enrolment, were given on a cent per cent basis to about 2,500 colleges for books and journals. The total amount paid to the colleges on this account during 1970-71 was Rs. 67.61 lakhs.\*

In view of the rising enrolments in science courses in the colleges and the pressing need to strengthen laboratories, the Commission decided to provide a non-recurring grant, on a cent per cent basis, to all colleges conducting undergraduate and postgraduate courses as indicated below:

- |   |            |
|---|------------|
| (i) A college conducting B.Sc. course in physical or biological sciences    | Rs. 15,000 |
| (ii) A college conducting B.Sc. courses in physical and biological sciences | Rs. 20,000 |
| (iii) A college providing M.Sc. courses :                                   |            |
| (a) Physics and Chemistry   | Rs. 15,000 |
| (b) Botany, Zoology, Biochemistry.<br>Geology and Home Science              | Rs. 10,000 |

Grants under this programme were provided to about 1,000 colleges during 1970-71.\*\*

#### *Grants to Delhi Colleges*

The Commission continued to provide maintenance grants to 40 non-government constituent/affiliated colleges of Delhi University. Grants to these colleges during 1970-71 amounted to Rs. 3.27 crores. Non-recurring grants amounting to Rs. 42.44 lakhs were also provided to 39 colleges during the year for various development projects.

\* It has been agreed that colleges which could not avail of this grant in 1970-71 may utilise it during the financial year 1971-72.

\*\* It has been decided that colleges which did not receive this grant in 1970-71 may utilise it during the financial year 1971-72. It has been further agreed that equipment grants may be made available to colleges for undergraduate courses in Geography, Psychology, Home Science, Statistics and Geology at the rate of Rs. 5,000 per subject for each subject, and for postgraduate courses in Geography, Psychology and Statistics at the rate of Rs. 10,000 for each subject. Up to November 1971, equipment grants have been made available to nearly 1,500 colleges.

During the year, one new college sponsored by Delhi Administration and two new colleges set up by private trusts started functioning. For meeting the increasing demands for admission, approval was given for introducing additional courses of study to 22 colleges.

*Medical Colleges : Aligarh Muslim University and Banaras Hindu University*

The development plan of the College of Medical Sciences, Banaras Hindu University, was examined by a committee appointed by the Commission. On the recommendation of this committee, additional teaching and non-teaching staff required by the college was approved and the following provisions were agreed to :

(a) Equipment	Rs. 29,00,000
(b) Accommodation	20,000 sq. ft.
(c) Books and journals	Rs. 3,00,000
(d) Maintenance of laboratories	Rs. 1,00,000
(e) Scholarships (each of the value of Rs. 300 per month for two years)	For 50% of the postgraduate students (excluding those in service) subject to a maxi- mum of 50 per year.

On the recommendations of a committee, the Commission has agreed to provide the following grants to the Aligarh Muslim University for the Jawaharlal Nehru Medical College, Aligarh :

(a) Equipment	Rs. 14.85 lakhs
(b) External services (For the college and hospital)	Rs. 32.43 lakhs

In addition to the above, the following grants have been approved on the recommendation of a committee for the hospitals attached to the medical colleges of the Aligarh Muslim University and the Banaras Hindu University :

*Jawaharlal Nehru Medical College, Aligarh*

Building	Rs. 56 lakhs
Equipment	Rs. 50 lakhs

*College of Medical Sciences, Varanasi*

Building (including out-patient department)	Rs. 30 lakhs
Equipment	Rs. 50 lakhs
For the 550 bed hospital @ Rs. 20 lakhs per year	Rs. 116 lakhs

The above provisions have been agreed to by the Government of India in the Ministry of Education and Social Welfare.

### PROGRAMMES FOR TEACHERS

The University Education Commission (1949) described teachers as 'the corner-stone of the arch of education', and stated that 'the success of the educational process depends so much on the character and ability of the teachers, that in any plan of the university reform, the main concern must be for securing an adequate staff with qualifications necessary for the discharge of its many-sided duties'. It is obviously necessary to attract men and women of high intellectual ability to the teaching profession and to provide them with the essential amenities and incentives.

#### *Summer Institutes, Seminars and Refresher Courses*

In view of the rapid advance in all fields of knowledge, a competent teacher has to be a continuing student. The programme of summer institutes, seminars and refresher courses has been undertaken by the Commission to enable teachers to improve their professional competence and effectiveness in the educational process. The programme, which has made sustained progress over the years, *inter alia*, helps to pave the way for a change in the stereotyped courses and instructional technique by acquainting teachers with new perspectives and methods.

#### SUMMER SCIENCE INSTITUTES FOR SCHOOL TEACHERS

In 1970-71, 60\* summer institutes were organised for school teachers in collaboration with the National Council of Educational Research and Training and the National Council for Science Education. The total number of participants in these institutes was 2,436. The progress of the programme of summer institutes for school teachers is evident from the facts and figures given in the following table :

\* 21 in Mathematics, 15 in Physics, 14 in Chemistry, and 10 in Biology.

### Summer Institutes for School Teachers : 1963-70

(Figures within brackets indicate the number of institutes organised)

Year	Number of Participants				Total
	Mathe- matics	Physics	Chemistry	Biology	
1963	34(1)	43(1)	38(1)	39(1)	154(4)
1964	169(4)	170(4)	148(4)	153(4)	640(16)
1965	616(16)	488(13)	464(13)	261(7)	1829(49)
1966	490(12)	468(12)	410(11)	308(8)	1676(43)
1967	747(15)	572(16)	580(16)	482(13)	2381(60)
1968	646(15)	594(17)	612(16)	450(13)	2302(61)
1969	600(16)	551(14)	734(18)	436(12)	2321(60)
1970	903(21)	610(15)	523(14)	400(10)	2436(60)
Total	4205(100)	3496(92)	3509(93)	2529(68)	13739(353)

### SUMMER SCIENCE INSTITUTES FOR COLLEGE TEACHERS

During the year under review, 56\* summer institutes were organised for colleges in collaboration with the United States National Science Foundation and the Agency for International Development. The total number of participants in these institutes was 1,887. The following table shows the number of institutes held year-wise and the enrolment in these institutes :

### Summer Institutes for College Teachers : 1964-70

(Figures within brackets indicate the number of institutes organised)

Year	Number of Participants				Total
	Mathe- matics	Physics	Chemistry	Biology	
1964	163(4)	166(4)	162(4)	168(4)	659(16)
1965	269(7)	258(8)	248(7)	277(7)	1052(29)
1966	326(9)	308(9)	344(9)	257(7)	1235(34)
1967	560(14)	375(11)	522(14)	410(11)	1867(50)
1968	627(18)	508(14)	449(14)	525(15)	2109(61)
1969	500(14)	524(17)	457(13)	372(10)	1853(54)**
1970	405(12)	601(19)	476(14)	405(11)	1887(56)
Total	2850(78)	2740(82)	2658(75)	2414(65)	10662(300)

\* 12 in Mathematics, 19 in Physics, 14 in Chemistry, and 11 in Biology.

\*\* In addition, a summer institute in Geology and one in Food & Nutrition were held in 1969. The number of participants in these institutes was 35 and 40, respectively.

## SUMMER INSTITUTES IN ENGLISH LANGUAGE TEACHING FOR COLLEGE TEACHERS

In 1970-71, 13 summer institutes were organised in English language teaching for college teachers in collaboration with the Central Institute of English, Hyderabad and the British Council, New Delhi. 522 teachers attended. The number of summer institutes held up to the end of 1970 was 53, and they were attended by 2,541 teachers. Thirteen fellowships, each of the value of Rs. 300 per month, were made available during 1970-71 to outstanding participants of the summer institutes for specialised training at the Central Institute of English, Hyderabad.

## SUMMER SCIENCE INSTITUTES FOR POSTGRADUATE STUDENTS

For the benefit of outstanding postgraduate students, the Commission organised two summer institutes in 1970, one each in Molecular Physics and Life Sciences, under the auspices of the Madras and Marathwada Universities, respectively.

## ORIENTATION COURSES FOR NEW/JUNIOR COLLEGE TEACHERS

Orientation courses for new/junior college teachers are intended to familiarise such teachers with instructional techniques, evaluation procedures, organisation of class tests and tutorials, planning of teaching programme, etc. During 1970-71, on the recommendation of the advisory committee, the Commission approved the organisation of these courses at 12 universities. Eight universities, however, organised these courses in summer 1971.

## RESEARCH PARTICIPATION PROGRAMME

The research participation programme for selected teachers and postgraduate students was continued during the year. This programme is intended to initiate teachers into the methodology and techniques of research and to provide them with opportunities for acquiring research experience under the guidance of competent staff. The programme also benefits selected postgraduate students and is designed to foster and develop the spirit of enquiry and research. The number of proposals approved under the programme during the last three years is shown in the following table :

## Research Participation Programme 1968-69 to 1970-71

### *Number of Research Participants*

<i>Subject</i>	<i>Teachers</i>			<i>Postgraduate Students</i>		
	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71*</i>	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71*</i>
Biology	31	9	17	37	9	7
Physics	3	8	19	11	2	7
Chemistry	28	20	16	30	4	7
Mathematics	12	7	11	8	—	2
Total	74	44	63	86	15	23

### CONFERENCES, SEMINARS AND REFRESHER COURSES

In addition to the programmes mentioned above, the Commission has been providing financial assistance to the universities for seminars, summer schools, symposia and academic conferences wherein the participants have an opportunity of discussing important problems relating to the improvement of the standards of teaching and research in various disciplines. During 1970-71, 164 proposals in this regard received from the universities were accepted by the Commission.

A cell for the preparation of material for the summer institutes in economics was approved at the Osmania University, Hyderabad.\*\*

The programmes mentioned above have been helpful in effecting improvement in teaching and research. They have given opportunities to teachers for acquainting themselves with new developments in their field of work, and with modern curricula and techniques of instruction. They are complementary to the steps taken by the universities to improve the curricula and the efficiency of the educational process.

#### *Assistance for Research*

The Commission has been giving financial assistance to teachers for books, chemicals, equipment, field work etc., required for the research work undertaken by them. The Commission's grant to a teacher is limited to Rs. 5,000 at a time, and this is normally to be utilised within a period of two years. In 1970-71, grants were approved for 243 projects in the humanities and social sciences, and for 623 projects in science subjects.

\*The programmes were initiated during summer 1971.

\*\*The cell, however, started functioning from August, 1971.



Grants amounting to Rs. 4.55 lakhs were paid during the year for the research projects under implementation. Since the institution of the scheme in 1963-64, more than 4,300 teachers have been benefitted under the scheme.

### *Exchange of Teachers*

Funds are available to the universities to enable them to invite reputed teachers and experts from other universities or institutions in the country to deliver lectures, conduct seminars or guide research workers. Expenditure on this account can be met by the universities on a cent per cent basis out of the 'unassigned grants' placed at their disposal each year, without any reference to the Commission. The scheme enables the universities to utilise the services of talented academic personnel in the institutions of higher learning as widely as possible.

### *National Lectureships*

A limited number of teachers and experts are selected each year as national lecturers for visiting some universities and colleges, to lecture on recent developments in their specialised fields, and to participate in programmes of advanced studies or research. It has been decided to institute 30 national lectureships every year in the first phase of the programme.

Each lecturer is expected to visit at least three universities or institutions, to spend not less than a week at each of them. The Commission provides an honorarium of Rs. 1,000 and travel expenses to a national lecturer and a grant of Rs. 250 for the preparation of lecture aids, etc.

On the basis of the nominations received from the universities and the recommendations of an expert committee, 27 scientists and scholars were invited to participate in this programme during 1970-71. Assistance was provided by the Commission for the publication of the lectures delivered by the participants.

### *Dr. Zakir Husain Memorial Lectures*

Dr. Zakir Husain Memorial Committee proposed that memorial lectures may be organised in the central universities by rotation in the memory of Dr. Zakir Husain. The Ministry of Education & Social Welfare agreed to provide a sum of Rs. 1,00,000 to the Commission for this purpose. It was proposed that honorarium for these lectures and expenditure on publication could be financed out of the interest accruing from the fund. These memorial lectures were delivered by Dr. M. S. Swaminathan, Director, Indian Agricultural Research Institute, at the University of Delhi on September 4-5, 1970. It has been decided that such lectures would

be organised in rotation at the Aligarh Muslim University, Banaras Hindu University, Jawaharlal Nehru University and the Visva-Bharati during the subsequent years.

### *National Associateships*

The Commission decided to institute a scheme relating to national associateships. This is intended to provide opportunities to scientists and scholars, who will be designated as national associates, to visit and work for short periods at institutions [in India] of their choice which have special facilities for the research or specialised studies undertaken by them. The scheme is to be implemented with effect from 1971-72.

### *Travel Grants*

Funds are provided by the Commission to the universities for giving travel grants to teachers and research workers, to enable them to visit centres of research and advanced study, or to attend conferences, seminars etc. in the country. Expenditure on this account is made by the universities, on a cent per cent basis, out of the unassigned grants provided to them by the Commission.

Financial assistance upto 50% of the expenditure on international travel is also available to college teachers selected for attending international conferences abroad. Such assistance is given to a teacher who is invited to preside at a conference or a section of the conference or is invited to contribute a paper, provided the sponsoring university is willing to share 50% of the expenditure on travel.

### *Retired Teachers*

Universities and colleges are helped for utilising the services of selected teachers beyond the age of superannuation, provided they are otherwise fit to continue their teaching and research. An honorarium of Rs. 6,000 per annum and an annual grant of Rs. 1,000 for contingencies related to the work undertaken are provided to the teachers under this scheme. Awards under the scheme were offered to 61 teachers. At the end of the year, 157 retired teachers, 92 in the humanities and social sciences and 65 in science subjects, were working in different institutions in the country. The scheme has enabled universities and colleges to get the benefit of the expertise and experience of a number of reputed teachers after their retirement.

### *Residential Accommodation*

As stated in the Commission's report for 1969-70, there is urgent and pressing need for suitable residential accommodation for teachers in the

universities and colleges. The Education Commission (1964-66) suggested that accommodation should be provided for 50% of the teachers in the universities and 25% in the affiliated colleges over the next 20 years. In view of the rapid increase in the number of teachers, it is obvious that the targets suggested by the Education Commission would require resources of a magnitude which are not presently available. The Commission continued to provide assistance to the universities and colleges for the provision of staff quarters and teachers' hostels within the resources available. During 1969-70 and 1970-71, the Commission gave assistance to 18 universities for the construction of 211 staff quarters and to 17 universities for the construction of teachers' hostels. The latter will provide accommodation for 253 teachers. In 1969-70, the proposals of 40 colleges for the construction of staff quarters and teachers' hostels for accommodating 272 teachers were accepted. In 1970-71, 15 such proposals were accepted for the benefit of 189 teachers.

The grants provided to the universities and colleges for the construction of staff quarters and teachers' hostels during the last three years are indicated below :

	<i>(Rupees in lakhs)</i>	
	<i>Universities</i>	<i>Colleges</i>
1968-69	27.16	9.05
1969-70	20.95	16.90
1970-71	27.05	19.11

The Commission normally provides two-thirds of the expenditure on teachers' hostels in colleges. In view of the pressing need for residential accommodation, the Commission agreed to provide assistance upto 80% of the expenditure on teachers' hostels to colleges which fulfill certain basic criteria.\* This assistance is available outside the financial ceiling of Rs. three lakhs for the fourth plan for various development projects for which grants are provided to the colleges by the Commission. Proposals in this regard were invited through the universities concerned.\*\*

\* To be eligible for assistance under the scheme, a college should have a standing of at least 10 years and ordinarily the strength of the teaching staff should not be less than 40.

\*\* The proposals received were examined by a committee in August 1971. On the recommendation of the committee, it was agreed to assist 114 colleges for the construction of teachers' hostels for which the Commission's contribution would not exceed Rs 1.55 crores. The Commission has decided that fresh proposals for assistance to colleges for teachers' hostels outside the fourth plan ceiling may be invited during 1972-73.

## PROGRAMMES FOR STUDENTS

The Commission has been giving high priority to the provision of essential services and amenities for the student community in the universities and colleges. The improvement of the conditions in which students live and work has an important bearing on the academic performance of students. With the rapid increase in student enrolment, which has doubled in a period of nearly 7-8 years, the need for adequate resources for programmes of student welfare has become extremely pressing.

It has been emphasized time and again that a careful and sympathetic consideration of the genuine requirements and difficulties of students is necessary, and for this purpose joint committees of teachers and students should be set up. It is always useful in such matters to consult student opinion so that grievances, if any, are redressed expeditiously.

The question of student participation in the academic and administrative affairs of the universities and colleges has been under examination by a committee appointed by the University Grants Commission under the Chairmanship of Dr. P.B. Gajendragadkar.\*

Several programmes have been undertaken by the Commission for the provision of essential facilities for the student community. Information about these programmes is given below :

### *Scholarships and Fellowships*

The enrolment at the postgraduate and research levels has increased significantly in recent years. Adequate provision for research scholarships and fellowships is necessary in view of the volume and diversity of specialised studies now being undertaken in the universities and colleges.

The University Grants Commission awards a specified number of scholarships and fellowships every year for advanced studies and research in different fields. These are in addition to the scholarships and fellowships specially created for centres of advanced study and those provided for approved programmes of research.

Senior and junior fellowships in the humanities, social sciences, science subjects and engineering & technology are awarded on an all-India

\* Part I of the Report of the Committee entitled *Governance of Universities* which *inter alia*, deals with the question of student participation in the academic and administrative affairs of the universities, was made available in June 1971.

basis on the recommendations of committees constituted for the purpose. A specific number of research scholarships are also placed at the disposal of the universities every year for promoting research. During 1970-71, 16 senior fellowships were awarded in humanities and social sciences and 35 in science subjects. A senior fellowship is of the value of Rs. 500 per month and the normal term of such a fellowship is two years which may be extended by one year in special cases.

Fifty-five junior fellowships were awarded in the humanities and social sciences and 96 in science subjects during the year. The value of a junior fellowship is Rs. 300 and its normal tenure is three years.

For research in various fields of engineering and technology, 63 fellowships were made available during the year. The value of these fellowships is Rs. 400 per month each.

At the end of the year under review, 143 scholars in the humanities and social sciences and 303 in science subjects (including engineering and technology) were carrying on research under the fellowships awarded by the Commission. The fellowships made available by the Commission every year have made an effective contribution to the promotion of specialised studies and research in various fields.

In addition to the fellowships mentioned above, which were awarded on an all-India basis, on the recommendations of selection committees constituted for the purpose, 600 research scholarships each of the value of Rs. 250 per month for a period of three years, were placed at the disposal of 70 universities. The universities were requested to award 2/3rd of the scholarships allocated to them in science subjects and to set apart some scholarships for encouraging research work in their affiliated colleges wherever requisite facilities for such work are available.

The Commission has decided to raise the value of research scholarships from Rs. 250 to Rs. 300 per month and the amount of contingency grant from Rs. 500/- per annum to Rs. 1,000/- per annum with effect from 1st April, 1971 and to designate the awards as junior research fellowships.

The Commission continued to give financial assistance to the universities concerned for awarding junior fellowships, each of the value of Rs. 250 per month, for promoting postgraduate studies in engineering and technology.

As in previous years, a limited number of scholarships were made available during 1970-71 for honours and postgraduate studies in Arabic and Persian.

Some scholarships were also provided for postgraduate studies and research to students of the hill areas of north-east India. The Commission has decided to increase the value of the scholarships for postgraduate studies from Rs. 120 to Rs. 150 per month with effect from 1st April, 1970. It has also been decided to institute a scheme for awarding such scholarships in Sanskrit, Pali and Prakrit also with effect from 1971-72.

### *Residential Accommodation for Students*

There is a pressing need for a considerable extension of residential accommodation for students. The number of students residing in hostels is shown in the following table :

<i>Year</i>	<i>Total student enrolment</i>	<i>No. of students residing in hostels</i>
1968-69	21,43,264	3,37,312
1969-70	24,32,630	3,53,527
1970-71	26,11,292	3,61,472

The grants paid for the construction of student hostels to the universities and colleges during the last three years are as follows

### **Construction of Hostels 1968-69 to 1970-71**

<i>Year</i>	<i>Grants Paid</i>	
	<i>Universities</i>	<i>Colleges</i>
1968-69	72.95	23.85
1969-70	68.48	34.62
1970-71	50.86	49.70

Up to 1969-70, proposals from 428 colleges for construction of student hostels were accepted by the Commission. In 1970-71, the proposals of 59 colleges were accepted and grants amounting to Rs. 81.84 lakhs were approved. These, it is expected, will create accommodation for 3,368 students.

The Commission agreed to give assistance to 30 universities during 1969-70 and 1970-71 for the construction of student hostels, which are expected to accommodate 4,230 students

The Commission decided to provide grants to colleges ranging from Rs. 5,000 to Rs. 12,000 on the basis of student enrolment for the improvement of facilities in the existing hostels (including sanitary facilities) and for student common-rooms and canteens. An amount of Rs. 52.49 lakhs was made available to 1,628 colleges during 1970-71.

The proposals of some universities for the improvement of dining halls, kitchens, canteens, common-rooms and sanitary arrangements were accepted and limited financial assistance was provided for this purpose.

A special allocation of Rs. 50 lakhs was made to the Banaras Hindu University for student amenities. The Commission has so far approved schemes for construction and improvement of student hostels and extension of the canteen building which are estimated to cost Rs. 30.41 lakhs. The requirements of other central universities in this regard are being examined.

#### *Student Homes, Non-Resident Student Centres*

The Commission continued to provide financial assistance to universities and colleges for the provision of student homes and non-resident student centres which, *inter alia*, are intended to provide facilities for study to day-scholars during their leisure hours.

The Commission's assistance for a student home, providing reading-room facilities for 100 students at a time, a stack room for about 5,000 books, a canteen and a dining hall, is limited to Rs. 1,00,000. Some assistance may also be provided for books. In view of the value and importance of the scheme it has been decided that assistance to a university for a student home may be given in addition to the financial allocations for its fourth plan development schemes. But if an additional student home is needed by a university, the expenditure on this has to be accommodated within the fourth plan allocation approved by the Commission.

In 1970-71, the proposals of 12 universities were accepted for the provision of students homes. So far assistance has been approved for 59 universities for this purpose.

The Commission's grant to a college for a non-resident student centre, intended to provide canteen and reading-room facilities, is limited to Rs. 35,000. In the case of a college with a student enrolment of 1,000 or above, the Commission has agreed to provide assistance up to Rs. 70,000. Up to 1969-70, the proposals of 306 colleges were accepted by the Commission.

*colleges were accepted for the provision of non-resident student centres for which a grant of Rs. 15.66 lakhs was approved.* In 1976-77

## *Study Centres*

On the recommendation of a committee appointed to consider programmes of student welfare, the Commission agreed to provide financial assistance to 55 universities for the establishment of 111 study centres in various parts of the country.\* These centres are to be located in areas having a large population of students, and are intended to provide essential library facilities, including multiple copies of text-books. The Commission's assistance for each study centre for the plan period would be as indicated below :

### NON-RECURRING

Books	Rs. 20,000
Stacks/furniture	Rs. 10,000

### RECURRING

Assistant librarian and other staff	Rs. 10,000 per annum
Contingencies (including electricity charges)	Rs. 3,000 per annum

The universities are expected to provide rent-free accommodation for these centres.

### *Book Banks*

The Commission decided to give financial assistance to colleges for the development of libraries with the specific purpose of making available to deserving students books on loan for the period of their studies. This, it has been suggested, may be done by setting up a special section (a kind of book bank) in the college library. It has been agreed that 75% of the total allocation, ranging from Rs.15,000 to Rs.30,000 to a college, depending on student enrolment, would be borne by the Commission. The implementation of this scheme was taken up in 1971-72. By November 1971, grants exceeding rupees one crore were provided to 950 colleges for the establishment of book banks.

The scheme was implemented during 1971-72. There has been an encouraging response from the universities. By November 1971, grants amounting to Rs. 25 lakhs were made available for 72 such centres.



### *Health Centres*

The Commission accepted the recommendations of the committee appointed to consider the programme of health services for students in the universities and colleges. It was decided that financial assistance may be given to the universities and selected colleges (two colleges per university, in the first phase) for the establishment/development of health centres, in the light of the recommendations made by the committee.\* It has been agreed that 75% of the non-recurring expenditure on health centres (building and equipment) would be borne by the Commission. As regards recurring expenditure, the Commission has agreed to make an annual contribution (the amount of which will be determined after an examination of the proposals received) for the current plan period.

### *Sports and Physical Education*

Keeping in view the funds available for the promotion of sports and physical education, the Commission agreed to give assistance in the first phase, to 12 universities and 81 colleges, for the construction of gymnasias. The proposal received in this regard had earlier been examined by a committee.

It was decided that assistance may also be given to the universities and colleges for the development of play fields and for the purchase of accessories for games and sports. The Commission agreed to meet 75% of the total expenditure of Rs. 15,000 for this purpose in the case of a university and of Rs. 10,000 in the case of a college.\*\*

The Commission has so far given its approval for the appointment of 77 sports coaches in 30 universities. Expenditure on this account to the extent of 75% is shared by the Commission.

### *Students' Aid Fund*

The Commission has been giving grants to the universities and colleges for the students' aid fund where from students are given financial assistance for paying their tuition or examination fees, for the purchase of books and for meeting other expenses related to their studies. With effect from 1970-71, the Commission's annual contribution to this fund has been raised from Rs. 10,000 to Rs. 15,000. For colleges, the Commission's grant will range from Rs. 750 to Rs. 3,250 on the basis of student

\* Proposals in this regard were invited from the universities in May, 1971.

\*\* The programme was taken up for implementation in 1971-72.

enrolment. Grants amounting to Rs. 40.56 lakhs were provided under this scheme to 33 universities and 1,792 colleges during 1970-71.

### *Visiting Studentships*

The Commission continued to give financial assistance to the universities for visiting studentships, to enable students to visit places of interest in the field of national development, culture, history, education, etc. The assistance available to a university under this programme is limited to Rs. 5,000. Grants amounting to Rs. 76,581 were made available to the universities during 1970-71.

## **COMMITTEES AND CONFERENCES**

The Commission appoints committees and convenes conferences from time to time to obtain the views and advice of experts on different problems relating to the development of teaching and research. Information about some of the important committees constituted and conferences convened during 1970-71 is given below :

### *Advisory Committee of Vice-Chancellors*

An advisory committee of vice-chancellors was set up to advise the Commission on matters relating to the development of higher education in the country. The committee normally meets two or three times a year.

Some of the important recommendations made by the committee at its meeting held on 2nd July and 3rd December, 1970, were as follows :

- ( i ) It would be desirable to make provision for the appointment of pro-vice-chancellors/rectors in the universities.
- ( ii ) Each university may appoint a group to assess the needs and priorities as regards amenities for students.
- ( iii ) A committee may be appointed to examine the facilities required for the teaching staff in colleges to enable them to improve their competence and effectiveness.
- ( iv ) Working groups may be appointed to examine the role and functions of the Advisory Committee of Vice-Chancellors and of the visiting committees that are constituted by the Commission for the assessment of the development programmes of the universities.
- ( v ) If a college on temporary affiliation has functioned well for a period of five years and has fulfilled the basic requirements, it should normally be given permanent affiliation.

Action is being taken on the recommendations made by the committee.

### *Conferences on University Administration*

A series of three conferences on university administration were organised by the Commission. Each conference was attended by 25 to 30 registrars of universities. These conferences provided an opportunity for an exchange of views on modern concepts of administration and organisation as applicable to universities and colleges, and for discussions on the measures necessary for rationalising and improving the administrative functioning of universities, including the working of the secretariat, organisation of examinations and admission procedures. The conferences were addressed by educational and management experts.

### *Meeting with the Standing Committee of the Inter-University Board of India*

A joint meeting of the Commission and the Standing Committee of the Inter-University Board of India was held on October 8, 1970. The programmes of student welfare undertaken by the Commission and by the National Sports Organisation initiated by the Ministry of Education and Social Welfare were reviewed. Regarding the academic grading of students it was agreed that while it would not be possible to prescribe uniform percentages of marks for categorising candidates into divisions, universities may consider introducing a system of awarding relative grades for the first 20 students in every subject in accordance with the following observation of the Education Commission (1964-66).

“A system of grading must be such as to bring out whether a student belongs, say to the top 20% of his class or to the bottom 20%. It is strongly recommended that even if the present system of examinations and classifying the results is continued, it should be supplemented by giving, in the same certificate, the relative grading of the student, say on a five point scale. Grade ‘A’ would mean that the student is in the top 20% of those who have been successful at the examination.”

### *Committee on Modern Indian Languages*

A committee has been appointed, under the chairmanship of Dr. T.P. Meenakshisundaram, formerly Vice-Chancellor, Madurai University, to review the courses of study in Modern Indian Languages, and to suggest measures for improving the standards of teaching and research in this field. A questionnaire for collecting the requisite information is being sent to the universities.

### *Committee on Social Work Education and Training*

The Commission has appointed a Standing Advisory Committee on Social Work Education and Training. The Committee has made a number of recommendations regarding the improvement of standards of education and training, revision of courses, employment opportunities, etc.

### *Other Committees*

Standing committees have been constituted to advise the Commission on the following subjects :

- (i) Centres of advanced study,
- (ii) Higher education in engineering and technology,
- (iii) Development of colleges,
- (iv) Programmes of cultural exchange,
- (v) Teacher education,
- (vi) Area studies,
- (vii) Scholarships and fellowships, and
- (viii) College science improvement programme.

Questions relating to the central universities are considered by the standing committee of the vice-chancellors of these universities.

Apart from the above, *ad hoc* committees are constituted from time to time, to advise the Commission on various problems.

### **INTERNATIONAL COLLABORATION**

As in previous years, the Commission promoted programmes involving international collaboration, and helped universities in obtaining assistance from the UNESCO and some foreign countries for their programmes of teaching and research. The programmes relating to foreign aid are operated by the Commission in consultation with the Department of Economic Affairs, Ministry of Finance, and other Union Ministries concerned. Assistance from foreign countries and sources is made available to the universities under specific agreements entered into by the Government of India with the countries and agencies concerned.

Reference has already been made earlier in this report to the assistance given by the UNESCO, the USSR and the UK for the centres of advanced study. Reference has also been made to the support given by

the United States Agency for International Development, the National Science Foundation, USA, and the British Council for programmes of summer institutes.

Information about some other programmes involving international collaboration is given below :

#### *United States PL-480 Programme*

As hitherto, assistance was made available from the rupee funds of the United States PL-480 programmes to a number of university departments and other institutions for research in agricultural, physical and biological sciences. In 1970-71, the national screening committee recommended 29 research proposals for assistance from these funds. These proposals involve a total expenditure of about Rs. 80 lakhs. During 1970-71, 22 research proposals were in operation in the universities and colleges under this programme.

#### *Cultural Exchange Programmes*

Under programmes of cultural exchange concluded by the Government of India with the governments of some foreign countries, the Commission organises exchange of visits by educationists, teachers and scholars between India and the countries concerned. During 1970-71, such exchange programmes were being implemented between India and the following countries :

Bulgaria	Czechoslovakia
France	Federal Republic of Germany
German Democratic Republic	Hungary
Poland	Romania
United Arab Republic	USSR
Yugoslavia	

The Commission also agreed to implement cultural exchange programmes, on an *ad hoc* basis, with the Latin American countries, Mexico, Greece, Turkey, Iran, Morocco, Ghana, Libya and Kenya.

In 1970-71, 51 Indian teachers visited different countries under the cultural exchange programme and 35 foreign visitors came to India. Under these programmes, the Commission received the Director, Ultra Sounds Laboratory, Pasteur Institute, Paris; Professor of Electronics, Paris University; Professor of Letters, Ankara University; Academician and Professor of Geography, Leningrad State University; Chief of Board on Experimental Physics, Friendship University, Moscow; Head of the Department of Indian Studies, Leningrad State University; Director, Insti-

*tute of History, Mongolian Academy of Sciences; and Academician and Director of Physical and Technical Institute, Uzbek Academy of Science, USSR.*

The selection of Indian teachers and scholars for participation under the cultural exchange programmes is made on the recommendation of a standing advisory committee appointed by the Commission. The foreign participants are selected by the countries concerned, and their placements and itinerary in India are arranged by the Commission in consultation with the universities and other institutions.

#### *Indo-UK Exchange Programme*

Under the programme of exchange of visits of young scientists between India and the UK, eight Indian scientists were selected to visit the UK in 1970-71. Similarly, eight British scientists were named for visiting India. The programme has helped in promoting contacts between young scientists in the Indian and British universities and has provided opportunities for useful collaboration and discussions.

#### *Commonwealth Academic Staff Fellowships*

At the instance of the Commonwealth Scholarships Commission in the United Kingdom, the University Grants Commission considered the nominations received for the Commonwealth Academic Staff Fellowships. Six candidates were recommended for participation in the programme during 1970-71. The recommendation was accepted by the Association of Commonwealth Universities and fellowships were made available to these candidates.

#### *Other Programmes*

Under the Colombo Plan, a number of Indian scholars went abroad, particularly to the UK and Japan, for further training.

The application of a number of Indian teachers and scholars were sent to the Indian National Commission for Co-operation with the UNESCO for participation in the various training programme organised by the UNESCO.

Under the programme of celebrations relating to the International Education Year sponsored by the UNESCO, the Commission agreed to award 10 fellowships, each of the value of Rs. 750 per month to participants from member states for work at the centres of advanced study in India. Six scholarships have already been awarded and the scholars have started their work at the centres. The other awardees are expected to avail of their fellowships during the session 1971-72.

A reference was made in the report for 1969-70 to the Centre for Exploration in Geophysics being set up at the Osmania University with Soviet collaboration under the Indo-USSR Agreement on Economic and Technical Cooperation. The project is expected to cost Rs. 88.40 lakhs which includes Rs. 35 lakhs (in roubles) as USSR credit required for specialised equipment, services of Soviet experts and technicians, and training facilities for Indian staff and students in the USSR. The project is being implemented in two phases over a period of five years, i.e., 1969-74. In 1970-71, an expenditure of Rs. 29.96 lakhs was incurred towards the cost of equipment supplied to the centre. The centre is expected to work in close collaboration with the other teaching and research institutions in India. It will keep liaison with the Geological Prospecting Institute, and the Institute of Exploration Geophysics, Moscow.

### CONCLUSION

The expenditure incurred during the last five years under various programmes initiated by the University Grants Commission was as indicated below :

*(Rupees in crores)*

Head	Expenditure				
	1966-67	1967-68	1968-69	1969-70	1970-71
Non-Plan*	4.94	7.52	8.08	9.06	9.83
Plan**	11.56	11.45	12.55	15.55	21.79

There has been a significant and extraordinary upsurge in recent years in the field of higher education in India. The rapid pace of growth and expansion is the result of a variety of factors, including the increasing recognition of the important role of education in the national economy and the growing aspiration of various sections of society for the prestige and advantages accruing from higher education. The facts and figures given in this report indicate the rising tempo of growth and develop-

\* Includes maintenance grants to central universities and the constituent/affiliated colleges of the University of Delhi.

\*\* Includes expenditure on all development programmes of universities and colleges.

ment in the field of higher education. The diversified needs of the developing economy of the country for specialised personnel are being largely met by the universities and other institutions of higher studies and research.

The spectacular increase in the volume and diversity of educational effort has been accompanied by a large expansion of the existing facilities, and a planned effort to maintain and improve the quality and standards of higher education. The development grants disbursed by the Commission have helped the universities and colleges to provide the requisite facilities for programmes of teaching and research. The existing syllabi and facilities for advanced studies in various subjects have already been reviewed by expert committees, and suggestions made for their improvement and modernisation. Efforts have been made to introduce reforms in the examination system and to improve the procedure of assessment. Questions relating to student welfare have been examined and steps taken to improve the conditions in which students live and work. The programme of summer institutes, seminars and orientation courses, for acquainting teachers with new developments in their respective fields of work, has yielded gratifying results. Centres of advanced studies have been established and developed to encourage 'the pursuit of excellence' in different fields. The development of centres of postgraduate studies at suitable places, under the auspices of the universities concerned, has obvious advantages as regards the maintenance of proper standards. Financial assistance has been made available to colleges for improving facilities for the courses conducted by them. A new programme for qualitative improvement of science teaching in the colleges has been undertaken. Grants have been provided to teachers for research and learned work. Services of selected teachers are being utilised after their superannuation under a scheme approved by the Commission. Travel grants are made available to teachers and research workers to enable them to visit and work at centres of research or advanced study in the country, and for attending conferences abroad. Research scholarships and fellowships are also being provided for programmes of advanced study and research. The development programmes being implemented are reviewed and evaluated from time to time by committees appointed by the Commission, and suggestions made for further improvement.

The Commission is grateful to the universities and colleges for their continued cooperation, and to all those who have worked as members of the UGC committees. The Commission also places on record its appreciation of the assistance and cooperation received from the State Governments, from various Ministries of the Government of India, from the



Planning Commission and from other organisations and agencies associated with the Commission's work and activities.

R. K. Chhabra

*Secretary*

D. S. Kothari

*Chairman*

A. S. Adke

Indumati Chimanlal

A. B. Lal

Tapas Majumdar

T. P. Singh

M. R. Yardi

# APPENDIX I

## INDIAN UNIVERSITIES AND INSTITUTIONS DEEMED TO BE UNIVERSITIES : 1970-71

<i>Year of Estab- lishment</i>	<i>S. No.</i>	<i>University</i>	<i>Total Enrolment</i>
1	2	3	4
1857	(1)	Calcutta University	2,34,840
	(2)	Bombay University	93,481
	(3)	Madras University	1,35,742
1887	(4)	Allahabad University	16,036
1916	(5)	Banaras Hindu University (Varanasi)	13,616
	(6)	Mysore University	74,862
1917	(7)	Patna University	11,958
1918	(8)	Osmania University (Hyderabad)	59,063
1921	(9)	Aligarh Muslim University	8,324
	(10)	Lucknow University	23,574
1922	(11)	Delhi University	60,664
1923	(12)	Nagpur University	74,465
1926	(13)	Andhra University (Waltair)	76,489
1927	(14)	Agra University	49,303
1929	(15)	Annamalai University (Annamalainagar)	6,296
1937	(16)	Kerala University (Trivandrum)	1,20,175
1943	(17)	Utkal University (Bhubaneswar)	32,746
1946	(18)	Saugar University	18,511
1947	(19)	Rajasthan University (Jaipur)	59,085
	(20)	Panjab University (Chandigarh)	1,13,397
1948	(21)	Gauhati University	59,866
	(22)	Kashmir University (Srinagar)	16,164
1949	(23)	Roorkee University	2,120
	(24)	Poona University	67,761
	(25)	M. S. University of Baroda	16,890
	(26)	Karnatak University (Dharwar)	63,577
1950	(27)	Gujarat University (Ahmedabad)	73,167
1951	(28)	S. N. D. T. Women's University (Bombay)	11,260
	(29)	Visva-Bharati (Santiniketan)	1,283
1952	(30)	Bihar University (Muzaffarpur)	57,014
1954	(31)	Sri Venkateswara University (Tirupati)	30,052

## APPENDIX I (Contd.)

1	2	3	4
1955	(32)	Sardar Patel University (Vallabh Vidyanagar)	12,372
	(33)	Jadavpur University (Calcutta)	4,896
1956	(34)	Kuruksetra University (Kurukshetra)	4,806
	(35)	Indira Kala Sangit Vishvavidyalaya (Khairagarh)	10
1957	(36)	Vikram University (Ujjain)	18,542
	(37)	Gorakhpur University	41,947
	(38)	Jabalpur University	17,321
1958	(39)	Varanaseya Sanskrit Vishvavidyalaya, (Varanasi)	1,030
	(40)	Marathwada University (Aurangabad)	36,230
1960	(41)	U. P. Agricultural University (Nainital)	1,820
	(42)	Burdwan University	47,148
	(43)	Kalyani University	1,964
	(44)	Bhagalpur University	35,977
	(45)	Ranchi University	36,345
1961	(46)	K. S. Darbhanga Sanskrit Vishvavidyalaya	—
1962	(47)	Punjab Agricultural University (Ludhiana)	1,953
	(48)	Punjab University (Patiala)	24,275
	(49)	Orissa University of Agriculture & Technology (Bhubaneswar)	1,290
	(50)	North Bengal University (Siliguri)	22,816
	(51)	Rabindra Bharati (Calcutta)	2,492
	(52)	Magadh University (Gaya)	47,253
1962	(53)	Jodhpur University	12,077
	(54)	Udaipur University	7,274
	(55)	Shivaji University (Kolhapur)	49,197
1964	(56)	Indore University	18,698
	(57)	Jiwaji University (Gwalior)	21,477
	(58)	Ravi Shankar University (Raipur)	22,226
	(59)	University of Agricultural Sciences (Bangalore)	1,838
	(60)	Andhra Pradesh Agricultural University (Hyderabad)	2,419
	(61)	Bangalore University	41,860
	(62)	Jawaharlal Nehru Krishi Vishvavidyalaya (Jabalpur)	1,629
1965	(63)	Dibrugarh University	20,967
1966	(64)	Kanpur University	38,035
	(65)	Meerut University	45,000

## APPENDIX I (Contd.)

1	2	3	4
	(66)	Madurai University	59,032
	(67)	Saurashtra University (Rajkot)	27,968
	(68)	South Gujarat University (Surat)	17,773
1967	(69)	Berhampur University	6,439
	(70)	Sambalpur University	11,732
1968	(71)	Gujarat Ayurveda University (Jamnagar)	2,817
	(72)	Jawaharlal Nehru University (New Delhi)	276
	(73)	Mahatma Phule Krishi Vidyapeeth	2,716
	(74)	Calicut University	52,344
	(75)	Awadesh Pratap Singh University (Rewa)	9,873
	(76)	Assam Agricultural University (Jorhat)	711
1969	(77)	Guru Nanak University (Amritsar)	44,840
	(78)	Jammu University (Jammu)	8,811
	(79)	Panjabrao Krishi Vidyapith (Akola)	4,352
1970	(80)	Haryana Agricultural University (Hissar)	1,116
	(81)	Himachal Pradesh University (Simla)	12,659
	(82)	Bhopal University	14,116
	(83)	Rajendra Agricultural University (Patna)	1,208
1971	(84)	Tamil Nadu Agricultural University	
(upto 31-3-71)		(Coimbatore)	—*

- Note :*
1. The universities have been arranged according to the year in which the respective Acts were adopted.
  2. The enrolment figures generally indicate the position as on August 15, 1970 and include the enrolment in constituent/affiliated colleges of the universities concerned. For Indira Kala Sangit Vishvavidyalaya, Rabindra Bharati and Varanaseya Sanskrit Vishvavidyalaya, figures relate to the university campuses only. Information about enrolment in K.S. Darbhanga Sanskrit Vishvavidyalaya is not available. For the colleges which did not send the statistics for 1970-71, the data of the previous year has been used.
  3. The total does not include the enrolment in intermediate classes of the colleges affiliated to the Board of High School and Intermediate Education, Uttar Pradesh.

Included in Madras University.

## APPENDIX I (Contd.)

<i>Year of Recog- nition*</i>	<i>S. No.</i>	<i>Institutions Deemed to be Universities</i>	<i>Total Student Enrolment</i>
1958	(1)	Indian Institute of Science (Bangalore)	913
	(2)	Indian Agricultural Research Institute (New Delhi)	444
1962	(3)	Gurukul Kangri Vishvavidyalaya (Hardwar)	327
	(4)	Jamia Millia Islamia (New Delhi)	837
1963	(5)	Gujarat Vidyapith (Ahmedabad)	525
	(6)	Kashi Vidyapith (Varanasi)	1,790
1964	(7)	Tata Institute of Social Sciences (Bombay)	139
	(8)	Birla Institute of Technology & Science (Pilani)	2,300
1967	(9)	Indian School of Mines (Dhanbad)	269
Grand Total			26,11,292

\* Year of recognition as an institution deemed to be a university under Section 3 of the UCG Act, 1956

**APPENDIX II**  
**DISTRIBUTION OF COLLEGES ACCORDING TO**  
**COURSES OF STUDY**  
**(1966-67 to 1970-71)**

<i>Courses of Study</i>	<i>Number of Colleges</i>				
	<i>1966-67</i>	<i>1967-68</i>	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71</i>
Arts, Science and Commerce	1,915	2,054	2,219	2,361	2,587
Engineering and Technology	105	106	105	106	107
Medicine, Pharmacy, Ayurveda, Nursing and Dentistry	137	141	157	167	176
Law	69	66	77	85	91
Agriculture	54	54	53	54	57
Veterinary Science	20	21	21	23	23
Education	200	202	224	235	258
Oriental Learning	177	179	179	188	226
Others (Physical Education, Music and Fine Arts)	72	76	77	78	79
Total	2,749	2,899	3,112	3,297	3,604

**APPENDIX III**  
**GROWTH OF STUDENT ENROLMENT**  
**(1960-61 to 1970-71)**

<i>Year</i>	<i>Total Enrolment*</i>	<i>Increase over the Preceding Year</i>	<i>Percentage Increase</i>
1	2	3	4
1960-61	10,34,934	37,797	3.8
1961-62	11,55,380	1,20,446	11.6
1962-63	12,72,666	1,17,286	10.2
1963-64	13,84,697	1,12,031	8.8
1964-65	15,28,227	1,43,530	10.4
1965-66	17,28,773	2,00,546	13.1
1966-67	19,49,012	2,20,239	12.7
1967-68	22,18,972	2,69,960	13.9
1968-69	24,73,264	2,54,292	11.5
1969-70	27,92,630	3,19,366	12.9
1970-71	30,01,292	2,08,662	7.5**

\* Including enrolment in intermediate classes under the Board of High School and Intermediate Education, U. P.

\*\* The decrease in the rate of growth of enrolment is being examined.

**APPENDIX IV**  
**STUDENT ENROLMENT : FACULTY-WISE**  
**(1968-69 to 1970-71)**

<i>Faculty</i>	<i>1968-69 Enrolment* % of Total</i>		<i>1969-70 Enrolment* % of Total</i>		<i>1970-71 Enrolment* % of Total</i>	
1	2	3	4	5	6	7
Arts (including Oriental Learning)	10,55,238	42.7	12,13,022	43.6	13,29,626	44.3
Science	8,02,369	32.4	9,14,739	32.8	9,48,009	31.6
Commerce	2,55,568	10.3	2,96,325	10.6	3,44,108	11.5
Education	48,536	2.0	51,854	1.8	56,922	1.9
Engineering and Technology	1,01,380	4.1	97,889	3.5	90,034	3.0
Medicine	90,470	3.7	95,017	3.4	97,601	3.2
Agriculture	53,120	2.1	43,415	1.6	43,352	1.4
Veterinary Science	6,590	0.3	6,131	0.2	6,222	0.2
Law	49,520	2.0	56,240	2.0	70,618	2.4
Others	10,473	0.4	12,998	0.5	14,800	0.5
Total	24,73,264	100.0	27,92,630	100.0	30,01,292	100.0

\*Including enrolment in intermediate classes under the Board of High School and Intermediate Education, U.P.



**APPENDIX V**  
**STUDENT ENROLMENT : STAGE-WISE**  
**(1968-69 to 1970-71)**

<i>Stage</i>	<i>1968-69 Enrolment* % of Total</i>		<i>1969-70 Enrolment* % of Total</i>		<i>1970-71 Enrolment* % of Total</i>	
1	2	3	4	5	6	7
Pre-university	5,17,021	20.9	5,62,947	20.2	5,60,809	18.7
Intermediate	3,75,558	15.2	4,23,174	15.2	4,74,869	15.8
Pre-professional	14,582	0.6	13,809	0.5	11,974	0.4
Graduate	13,88,335	56.1	16,03,898	57.4	17,46,090	58.2
Postgraduate	1,35,459	5.5	1,46,804	5.3	1,61,182	5.4
Research	12,145	0.5	12,474	0.4	13,311	0.4
Diploma/ Certificate	30,164	1.2	29,524	1.0	33,057	1.1
Total	24,73,264	100.0	27,92,630	100.0	30,01,292	100.0

\* Including enrolment in intermediate classes under the Board of High School and Intermediate Education, U. P.

## APPENDIX VI

### STRENGTH AND DISTRIBUTION OF TEACHING STAFF IN UNIVERSITY DEPARTMENTS/UNIVERSITY COLLEGES (1966-67 to 1970-71)

<i>Year</i>	<i>Professors</i>	<i>Readers</i>	<i>Lecturers*</i>	<i>Tutors/ Demos- trators</i>	<i>Total</i>
1	2	3	4	5	6
1966-67	1,401 (9.4)	2,320 (15.6)	10,264 (68.9)	915 (6.1)	14,900 (100.0)
1967-68	1,606 (9.2)	2,575 (14.8)	12,110 (69.3)	1,165 (6.7)	17,456 (100.0)
1968-69	1,872 (9.3)	2,834 (14.9)	12,991 (68.2)	1,361 (7.1)	19,058 (100.0)
1969-70	1,903 (9.6)	2,944 (14.9)	13,449 (68.1)	1,461 (7.4)	19,757 (100.0)
1970-71	2,139 (9.9)	3,324 (15.4)	14,389 (66.5)	1,767 (8.2)	21,619 (100.0)

Note : Figures within brackets indicate the percentage of the cadre to the total staff in that year.

\*Including Assistant Professors and Assistant Lecturers

**APPENDIX VII**  
**DISTRIBUTION OF TEACHING STAFF IN AFFILIATED**  
**COLLEGES ACCORDING TO DESIGNATION**  
**(1966-67 to 1970-71)**

<i>Year</i>	<i>Senior Teachers*</i>	<i>Lecturers**</i>	<i>Tutors/ Demos- trators</i>	<i>Total</i>
1	2	3	4	5
1966-67	11,095 (14.2)	56,164 (71.6)	11,092 (14.2)	78,351 (100.0)
1967-68	11,655 (13.7)	61,861 (72.8)	11,482 (13.5)	84,998 (100.0)
1968-69	12,167 (13.2)	67,320 (73.3)	12,398 (13.5)	91,885 (100.0)
1969-70	12,838 (12.9)	73,360 (73.9)	13,097 (13.2)	99,295 (100.0)
1970-71	13,185 (12.3)	80,468 (75.0)	13,604 (12.7)	1,07,257 (100.0)

Note : Figures within brackets indicate the percentage of the cadre to the total staff in that year.

\*Including Principals.

\*\*Including Assistant Lecturers.

**DEGREES AWARDED****(1965-66 to 1967-68)**

<i>Faculty</i>	<i>Number of Recipients</i>		<i>Percentage Increase</i>	
	<i>1965-66</i>	<i>1966-67</i>	<i>1967-68</i>	<i>1965-66 to 1967-68</i>
1	2	3	4	5
<b>Faculty of Arts</b>				
B.A.*	90,928	1,14,353	1,40,319	54.3
M.A.	27,960	30,726	35,438	26.7
Doctorates	541	624	763	41.0
<b>Faculty of Science</b>				
B.Sc.*	42,437	49,767	49,045	39.1
M.Sc.	8,009	8,892	10,454	30.5
Doctorates**	683	765	990	44.9
<b>Faculty of Commerce</b>				
B.Com.*	20,930	22,611	28,598	36.6
M.Com.	3,321	3,400	3,843	15.7
Doctorates	20	26	31	55.0
<b>Faculty of Education</b>				
B.Ed./B. T.	24,945	29,747	32,006	28.3
M.Ed.	810	911	1,024	26.4
Doctorates	17	21	28	64.7
<b>Faculty of Law</b>				
LL.B./B.L.	8,587	10,027	13,043	51.9
LL.M./M.L.	117	137	122	4.3
Doctorates	1	3	4	300.0
<b>Faculty of Agriculture</b>				
B.Sc. (Agri.)	4,902	6,129	5,476	11.7
M.Sc. (Agri.)	1,011	892	1,223	21.0
Doctorates***	92	96	89	-3.3

\* Includes honours.

\*\* Doctorates in mathematics have been included in the faculty of science.

\*\*\* Inclusive of output figures of the Indian Agricultural Research Institute.

# APPENDIX VIII (Contd.)

1	2	3	4	5
Faculty of Vet. Science				
B.V.Sc.	855	1,120	996	16.5
M.V.Sc.	104	174	136	30.8
Doctorates	3	9	21	600.0
Faculty of Medicine				
M.B.B.S.	5,516	6,317	6,892	24.9
M.D./M.S.	1,049	1,115	1,121	6.9
Doctorates	39	5	20	—48.7
Faculty of Engg /Tech.				
B.E./B.Sc. (Engg.) } B.Sc. (Tech.) etc. }	12,710	14,001	15,422	21.3
M.E./M.Sc. (Engg.) } M.Sc. (Tech.) etc. }	520	628	620	19.2
Doctorates	39	33	66	69.2
Total	2,56,146	3,02,529	3,57,790	39.7

# APPENDIX IX

## CENTRES OF ADVANCED STUDY

<i>S. No.</i>	<i>University</i>	<i>Department Recognised as Centre of Advanced Study</i>	<i>Major Field of Specialisation</i>
1	2	3	4
<b>I. SCIENCE</b>			
1.	Annamalai	Marine Biology	Marine Biology
2.	Bombay	Mathematics Chemical Technology	Pure Mathematics Applied Chemistry
3.	Calcutta	Mathematics Radiophysics & Electronics	Applied Mathematics Radiophysics & Electronics
4.	Delhi	Physics Chemistry  Botany  Zoology	Theoretical Physics Chemistry of Natural Products Plant Morphology & Embryology Cell Biology & Endocrinology
5.	Indian Institute of Science, Bangalore	Bio-Chemistry	Proteins Lipids & Vitamins
6.	Madras	Physics  Botany  Mathematics	Crystallography & Bio-Physics Plant Pathology & Mycology Pure Mathematics
7.	Osmania	Astronomy	Astronomy
8.	Panjab	Geology  Mathematics	Himalayan Geology & Palaeontology Pure Mathematics
9.	Saugar	Geology	Structural Geology & Geomorphology

## APPENDIX IX (Contd.)

1	2	3	4
<b>II. SOCIAL SCIENCES AND THE HUMANITIES</b>			
1.	Aligarh	History	Medieval Indian History
2.	Annamalai	Linguistics	Dravidian Linguistics
3.	Baroda	Education	Education
4.	Banaras	Philosophy	Indian Philosophy
5	Bombay	Economics	Public Finance & Industrial Economics
6.	Calcutta	Ancient Indian History & Culture	Ancient Indian History & Culture
7	Delhi	Economics  Sociology	Economic Development & Economic History Sociology
8.	Madras	Philosophy	Advaita & Allied System of Philosophy
9.	Poona	Economics (Gokhale Institute) Linguistics (Deccan College) Sanskrit	Agricultural Economics  Applied Linguistics  Sanskrit Literature
10.	Visva-Bharati	Philosophy	Metaphysics

## APPENDIX X

**FACULTY-WISE ENROLMENT\* : UNIVERSITIES AND  
AFFILIATED COLLEGES  
(1970-71)**

<i>Faculty</i>	<i>University Departments/ University Colleges</i>	<i>Affiliated Colleges</i>	<i>Total</i>	<i>Percentage in Affiliated Colleges</i>		
				<i>1970-71</i>	<i>1969-70</i>	<i>1968-69</i>
1	2	3	4	5	6	7
Arts	1,29,978	10,29,608	11,59,586	88.8	88.8	87.2
Science	76,653	6,88,846	7,65,499	90.0	90.6	90.1
Commerce	27,143	3,02,535	3,29,678	91.8	91.5	91.2
Education	6,561	50,361	56,922	88.5	88.2	87.9
Engineering/ Technology	24,791	65,243	90,034	72.5	72.6	72.4
Medicine	7,999	89,602	97,601	91.8	92.9	91.2
Agriculture	18,223	10,309	28,532	36.1	41.1	45.1
Veterinary Science	4,012	2,210	6,222	35.5	39.3	43.6
Law	26,341	44,277	70,618	62.7	59.2	61.7
Others	2,294	4,306	6,600	65.2	68.8	53.9
Total	3,23,995	22,87,297	26,11,292	87.6	87.7	86.7

\*Excluding enrolment in intermediate classes affiliated to the Board of High School and Intermediate Education, U. P.



# APPENDIX XI

## STAGE-WISE ENROLMENT\* : UNIVERSITIES AND AFFILIATED COLLEGES (1970-71)

Stage	University Affiliated Departments/ Colleges	Total	Percentage in Affiliated Colleges	University Colleges
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1		2	3	4	5	6	7
Pre-university	24,629	5,36,180	5,60,809	95.6	95.4	95.3	
Intermediate	96	84,773	84,869	99.9	99.8	99.5	
Pre-professional	1,030	10,944	11,974	91.4	92.6	92.5	
Graduate	1,87,834	15,58,256	17,46,090	89.2	89.3	88.2	
Postgraduate	84,270	76,912	1,61,182	47.7	48.3	46.4	
Research	11,744	1,567	13,311	11.8	12.7	10.7	
Diploma, Certificate	14,392	18,665	33,057	56.5	57.0	56.6	
Total	3,21,995	22,87,297	26,11,292	87.6	87.7	86.7	

\*Excluding enrolment in intermediate classes affiliated to the Board of High School and Intermediate Education, U. P.

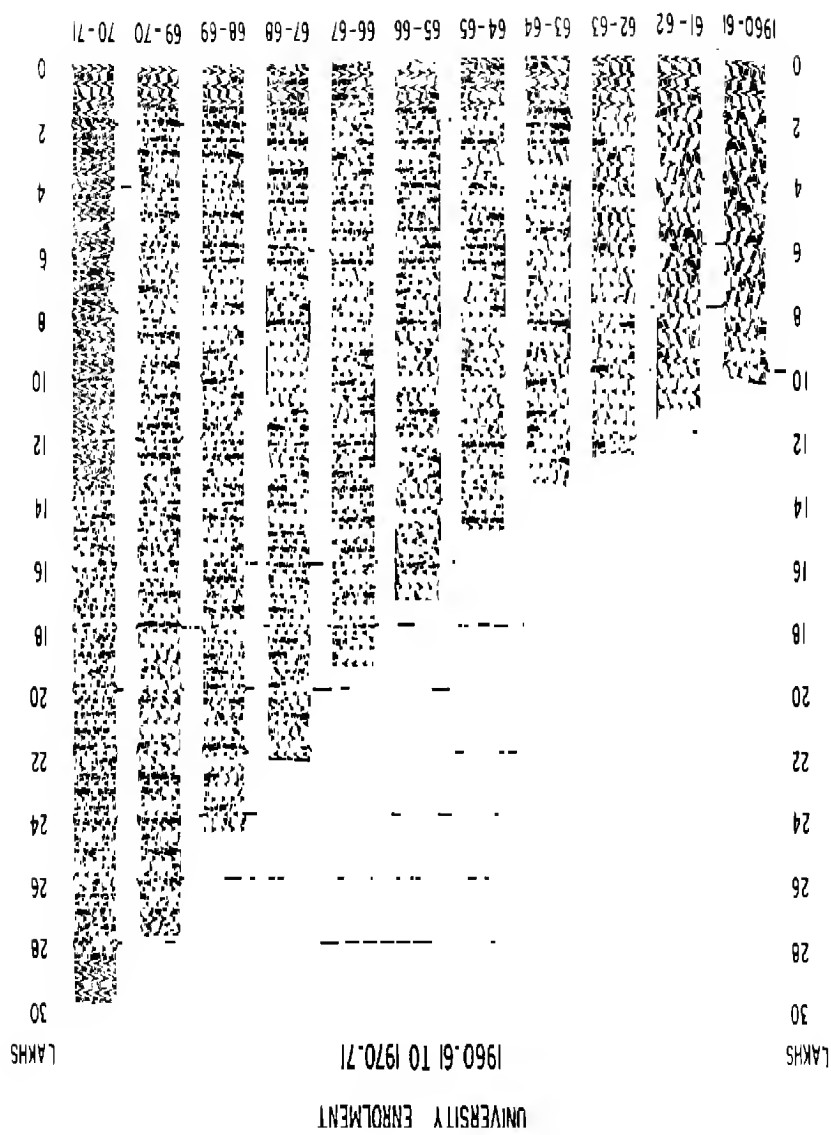
**APPENDIX XII**  
**DEVELOPMENT GRANTS PAID TO COLLEGES**  
**(1970-71)**

<i>S. No.</i>	<i>Scheme</i>	<i>Amount (Rupees)</i>
1.	Construction of hostel	49,70,278
2.	Laboratory and library facilities	2,78,44,296
3.	Construction of staff quarters	19,10,704
4.	Development of postgraduate studies in science	17,56,889
5.	Development of postgraduate studies in humanities	6,93,751
6.	Books and journals	67,61,370
7.	Welfare schemes :	
	(i) Students' aid fund	37,93,267
	(ii) Non-resident students centres	9,17,736
	(iii) Hobby workshop	56,114
	(iv) Water cooler	49,474
	(v) Students welfare programme	52,45,729
8.	(i) Grants to constituent/affiliated colleges of Delhi University for specific purposes	42,43,671
	(ii) Maintenance grants to new colleges	95,10,483
9.	Centenary grants	67,000
10.	Construction of shooting ranges	9,653
11.	Scholarships etc.	
	(i) Research fellowships	1,84,187
	(ii) Utilisation of services of retired teachers	3,47,884
	(iii) Financial assistance to research workers	2,65,001
	(iv) Research scholarships	32,838
12.	Improvement of chalkboard	1,22,183
13.	Travel grants for attending conferences	82,256
14.	Teachers' training colleges	24,09,276
15.	Cultural exchange programmes	23,426
16.	Purchase of semi-micro analysis equipment	3,10,200
17.	College science improvement programme	22,08,600
18.	Summer schools, seminars and conferences	1,22,500
19.	Studies in Community Development Cooperation and Panchayati Raj	11,500
20.	Miscellaneous schemes including revision of salary scales	85,231
	<b>Total</b>	<b>7,40,35,497</b>

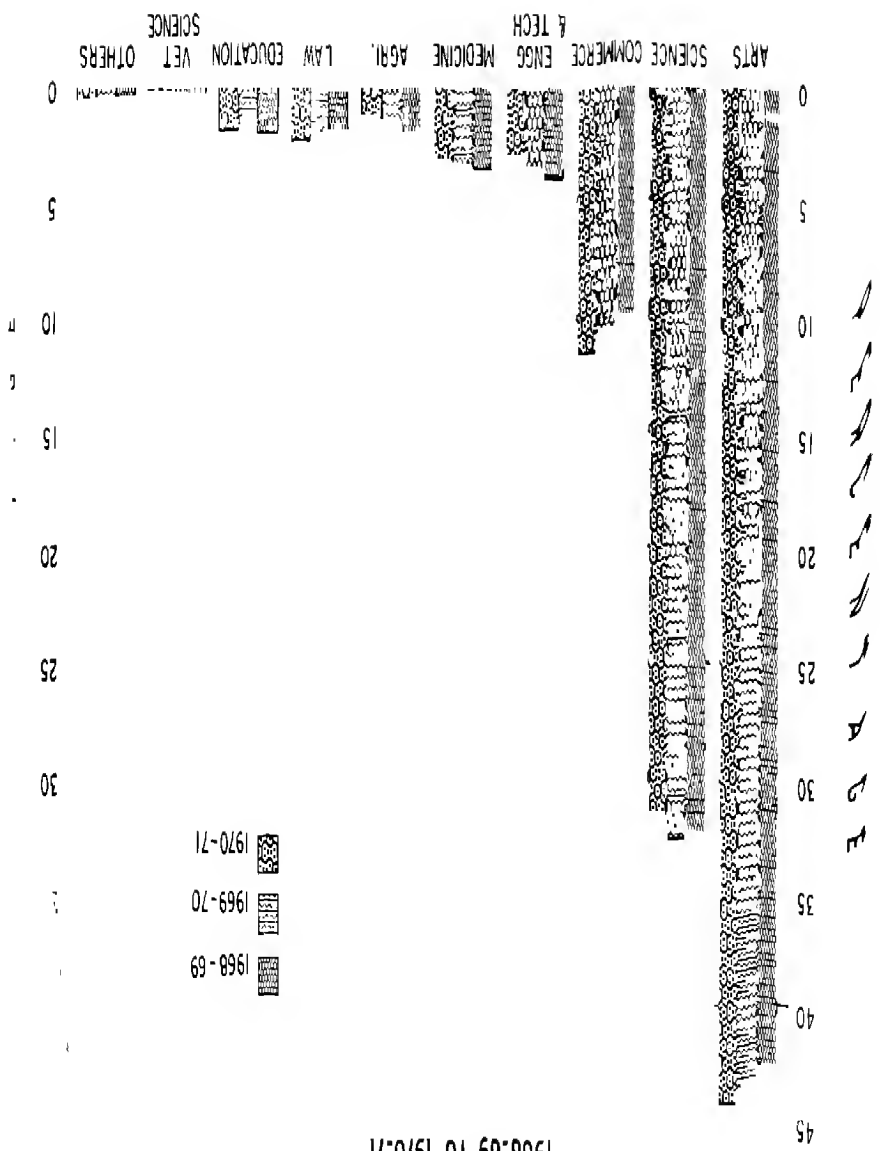
**APPENDIX XIII**  
**EXPENDITURE : PLAN AND NON-PLAN PROJECTS**  
**(1970-71)**

<i>Purpose</i>	<i>Amount (Rupees)</i>
<b>NON-PLAN PROJECTS</b>	
1. Administrative Charges	38,85,280
2. Block Grants to Central Universities	6,79,47,706
3. Maintenance Grants to Constituent/Affiliated Colleges of Delhi University	2,32,06,490
4. Schemes not covered under Block Grant	32,16,000
Total (Non-Plan Projects)	9,82,55,476
<b>PLAN PROJECTS</b>	
1. Grants to Central and State Universities for Humanities	2,09,63,369
2. Grants to Central and State Universities for Science	3,45,42,046
3. Grants to Central and State Universities for Engineering and Technology	1,86,35,964
4. Grants to Constituent and Affiliated Colleges	7,40,35,497
5. Grants to Central and State Universities for Miscellaneous Schemes	4,22,63,422
6. Miscellaneous Expenditure (including expenditure on equipment obtained under the U.S. dollar Loan Scheme, on the rouble credit scheme, UNESCO coupons etc.)	2,48,94,405
7. Expenditure from Grants received from Government of India and Other Sources for Specific Purposes	25,86,599
Total (Plan Projects)	21,79,21,302
<b>Grand Total (Plan and Non-Plan)</b>	<b>31,61,76,778</b>





# FACULTY-WISE ENROLMENT 1968-69 TO 1970-71



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PRE-UNIV.



INTER



PRE-PROF



GRADUATE POST-GRADUATE RESEARCH

DIP/CEP

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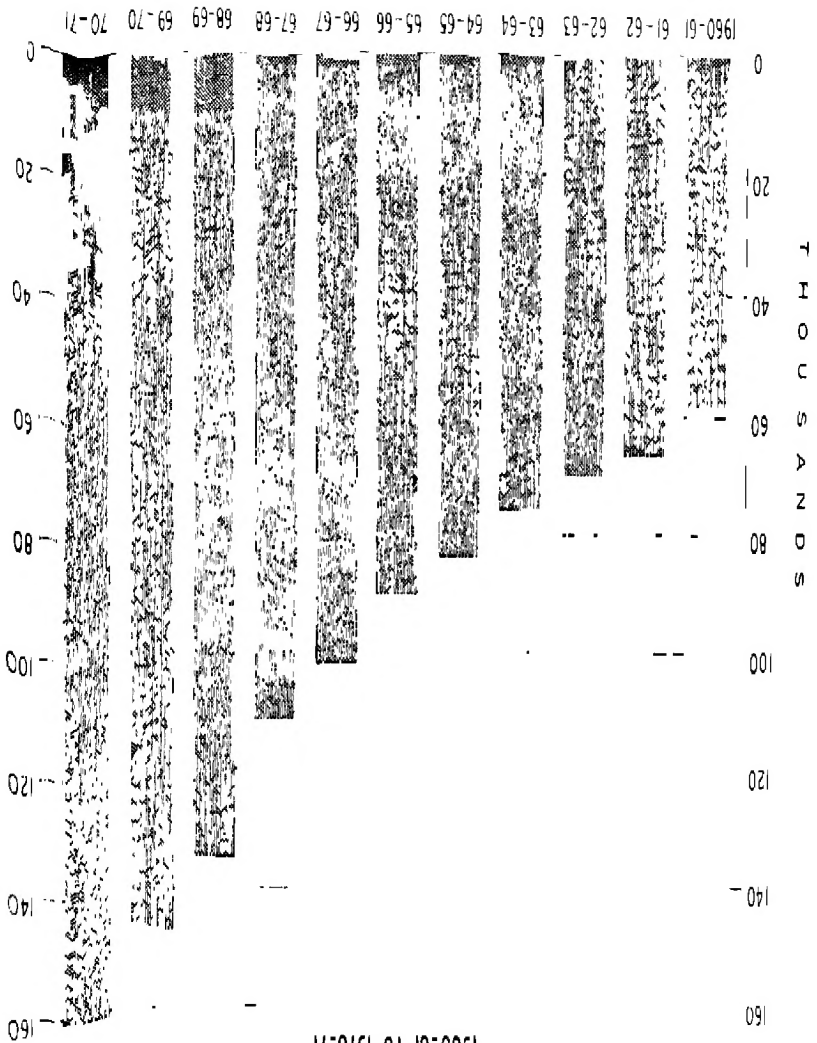
1970-71  
1969-70  
1968-69

1968-69 TO 1970-71

ENROLLMENT AT DIFFERENT STAGES

Y E A R

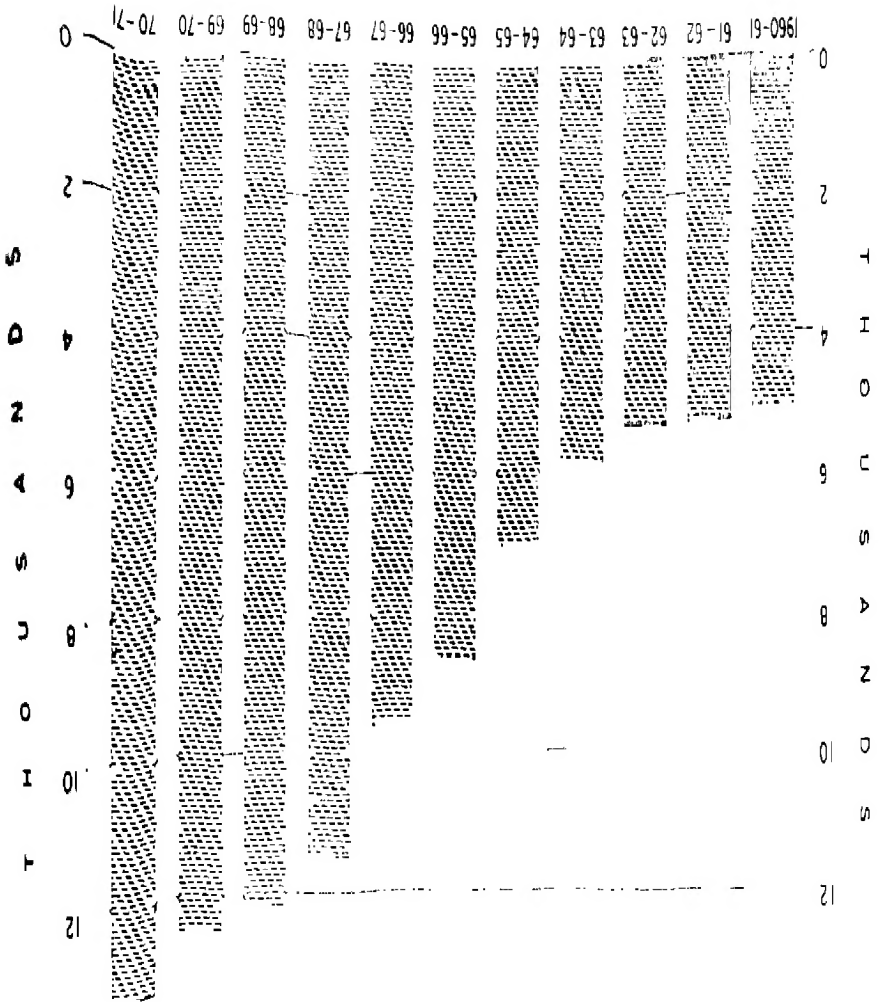
POST-GRADUATE ENROLMENT  
1960-61 TO 1970-71



1970-71



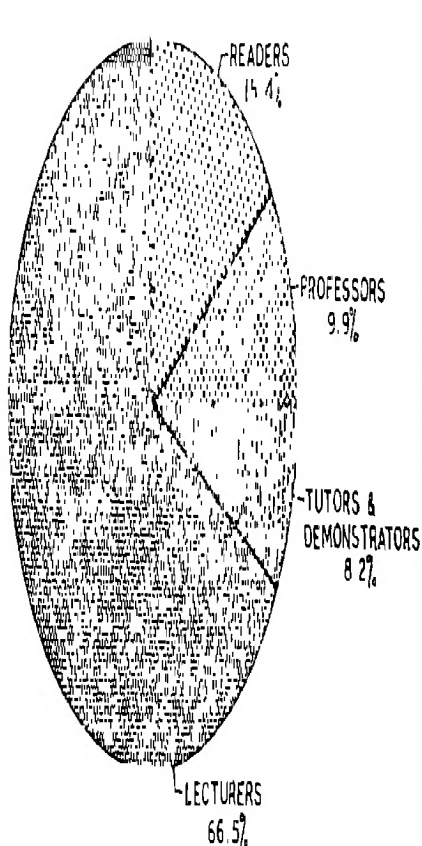
# Y E A R



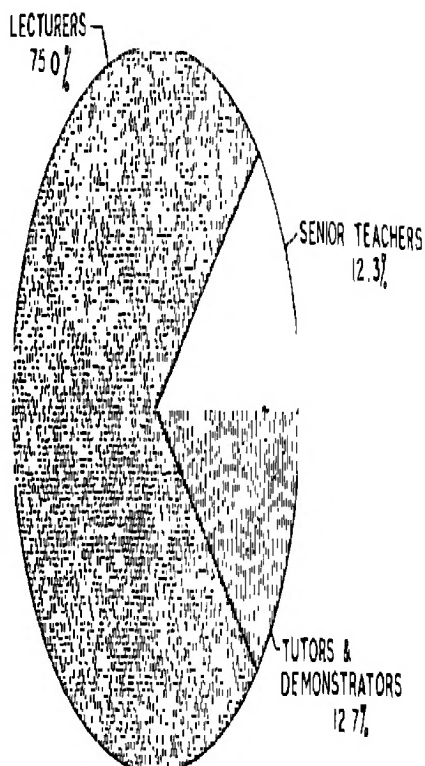
1960-61 TO 1970-71

14

# DISTRIBUTION OF STAFF ACCORDING TO DESIGNATION 1970-71



UNIVERSITY DEPARTMENTS



AFFILIATED COLLEGES

FACULTY-WISE DISTRIBUTION OF STAFF  
1970-71

